

REMARKS

Claims 27-48 are pending in the application. Claims 44-47 have been withdrawn from consideration as being drawn to a non-elected invention. Claim 27 has been amended to overcome the rejections under 35 USC 112. New claims 49 and 50 are added.

In response to the drawing objections, replacement sheets of FIGS. 1 and 2 are attached. FIGS. 1 and 2 have been amended to include a thin covering layer over the recess 2a. No new matter has been added. Support for the thin covering layer is provided in the specification (see, e.g., page 4, lines 19-26; page 7, line 29 to page 8, line 4; page 10, lines 26-27; page 11, line 27 to page 12, line 3; and page 13, lines 1-5).

Claims 27-43 and 48 were rejected under 35 USC 112, first paragraph, as "not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention" (Office Action, page 2). In the Office Action, it was stated that the specification "does not disclose a light-sensitive sensor ... which is formed in the element or on the substrate of the auxiliary carrier as recited in claim 27." The cited language has been removed from claim 27, thereby obviating the rejection.

As amended, claim 27 recites "a light sensitive sensor is arranged in a region in which the optical arrangement reflects some of a light beam emitted by the element." This language is fully supported by the application as originally filed. For example, with reference to FIG. 1, a sensor 3 is formed in the auxiliary carrier 2, where reference numeral 14 indicates reflected light that can be received by the sensor 3 (see page 11 lines 20-29). It is believed that the rejections under 35 USC 112, first paragraph, have been overcome.

Claim 27 has been amended to remove the alternative language (for example, "on/in") noted by the Examiner. It is respectfully requested that the rejections under 35 USC 112, second paragraph, be withdrawn.

Applicants' claimed invention is directed to an optoelectronic component, including an optical arrangement which modifies the beam path of light, and **a light sensitive sensor** arranged in a region where the optical arrangement reflects some of a light beam (claim 27). As recited in claims 49 and 50, the light sensitive sensor 3 can be formed in the auxiliary carrier 2 (see FIG. 1; page 11, lines 20-21), or in the light-emitting element 1 (see FIG. 3; page 13, lines 14-15).

Applicants' claimed invention can provide significant benefits. Because the light sensitive sensor is formed in either the auxiliary carrier or the light-emitting element (or on surfaces thereof), the sensor does **not** require installation in a housing with the optoelectronic component, as in the prior art (see, e.g., page 2, lines 10-25). Direct integration of the sensor in the auxiliary carrier makes it possible during irradiation of the same to detect, e.g., the quality or quantity of emitted or received light independently of the light emitting element (see page 5, lines 4-14). Moreover, by forming the sensor in the auxiliary carrier or the light-emitting element, the Applicants' invention provides a less complex procedure, which improves efficiency and reduces manufacturing costs.

Claims 27-43 and 48 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent 4,967,241 to Kinoshita et al. (hereinafter "Kinoshita") in view of European Publication No. 0 413 489 to Pimpinella et al. (hereinafter "Pimpinella"). This rejection is respectfully traversed.

The combination of Kinoshita in view of Pimpinella fails to teach or suggest an optoelectronic component having at least a light sensitive sensor arranged in a region in which an optical arrangement reflects some of a light beam emitted by a light-emitting element.

With reference to FIGS. 1 and 2, as cited in the Office Action, Kinoshita teaches a semiconductor light emitting device 14 including a p-type region 50 formed in a substrate 48 in the path of emitted light.

However, as noted in the Office Action, Kinoshita fails to teach or suggest an optical arrangement provided in the optical axis of the component. Moreover, Kinoshita does not teach or suggest that the light sensitive sensor is arranged "in a region in which the optical arrangement **reflects** some of a light beam emitted by the element" (claim 27).

Pimpinella teaches an optoelectronic device with a light-emitting device 23, a member 20 for supporting the device 23, and a light-transmitting member 10 for at least partially transmitting light, where an aperture 22 is provided for the passage of light (see FIGS. 2 and 6, as cited in the Office Action). Pimpinella does not teach or suggest a light sensitive sensor arranged "in a region in which the optical arrangement reflects some of a light beam emitted by the element," as recited in claim 27.

Moreover, one of ordinary skill in the art would not be able to combine Pimpinella with the Kinoshita reference to produce the Applicants' claimed invention. If Pimpinella's arrangement of member 10, light-emitting device 23, and lens 50 were somehow incorporated in Kinoshita, the resulting combination would be **inoperable**, as the p-type region 50 of Kinoshita would be unable to detect any reflected light, which would be blocked by the lens 50.

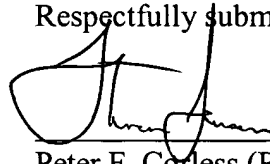
Therefore, the combination of Kinoshita in view of Pimpinella does not teach or suggest the Applicants' claimed invention. It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Date: February 5, 2004

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Respectfully submitted,



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